

APPENDIX A

DISEASES AND CONDITIONS

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ASTHMA

Asthma is a chronic breathing disorder and is the most common chronic health problem among children. Children with asthma have attacks of coughing, wheezing, and shortness of breath that may be very serious. These symptoms are caused by spasms of the air passages in the lungs. The air passages swell, become inflamed, and fill with mucus, making breathing difficult. Many asthma attacks occur when children get respiratory infections, including infections caused by common cold viruses. Attacks can also be caused by:

- Exposure to cigarette smoke.
- Stress.
- Strenuous exercise.
- Weather conditions, including cold, windy, or rainy days.
- Allergies to animals, dust, pollen, or mold.
- Indoor air pollutants such as paint, cleaning materials, chemicals, or perfumes.
- Outdoor air pollutants, such as ozone.

As with any child with a chronic condition, the early childhood provider and parents should discuss specific needs of the child and assess if the provider is willing and able to care for a child with these needs.

Children with asthma may be prescribed medications to help relax the small air passages and/or to decrease the amount of mucus produced from inflamed airways. These medications may need to be administered every day or only during attacks. A provider must understand which medication to give for the symptoms the child is displaying. Asthma medication is available in several forms including liquid, powder, and pill. Asthma medication also is breathed in from an inhaler or a nebulizer, which makes a fine mist from the medication, which is inhaled, directly into the lungs. The early childhood provider should be given clear instructions on how and when to administer medications, and the name and telephone number of the child's doctor.

The early childhood provider should be provided with and keep on file, an asthma action plan for each child with asthma. An asthma action plan lists emergency information, activities or conditions likely to trigger an asthma attack, current medications being taken, medications to be administered by the child care provider, and steps to be followed if the child has an acute asthma attack. Additional support from the child's health care providers should be available to the early childhood provider as needed.

If a child with asthma has trouble breathing:

- Stop the child's activity and remove whatever is causing the allergic reaction, if you know what it is.
- Calm the child; give medication prescribed, if any, for an attack.
- Contact the parents. If the child does not improve very quickly, and the parents are unavailable, call the child's doctor.
- **If the child is unable to breathe, call 911.**

Record the asthma attack in the child's file. Describe the symptoms, how the child acted during the attack, what medicine was given, and what caused the attack, if known.

BOTULISM AND INFANT BOTULISM **(*Clostridium botulinum*)**

Incubation Period: Symptoms of food-borne botulism usually appear within 12 to 36 hours after exposure. The incubation period may range from 6 hours to 8 days.

Methods of Transmission: Food-borne botulism results when a food contaminated with spores of *C botulinum* is preserved or stored improperly. Infant botulism results after the spores have germinated, multiplied and produced botulism toxin in the intestine. Infant botulism is not transmitted from person to person. In most cases, the source of the spore remains unknown, but honey has been identified as a source.

Signs and Symptoms: Symptoms either develop in the space of a few hours, or slowly over a few days. Symptoms may include generalized weakness, decreased muscle tone, paralysis, blurred vision, dry mouth, difficulty swallowing and/or difficulty speaking. Infant botulism is usually preceded by constipation, lethargy, poor feeding, weak cry, and generalized weakness and hypotonia (poor muscle tone)

Minimal Control Measures: Never use home canned foods in an early childhood program. Do not give honey to children younger than 12 months of age.

Other Information: Botulism is a very serious disease and death can occur rapidly. Quick identification and treatment is vital.

Report this illness to your local health department immediately. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.

CEREBRAL PALSY

Cerebral palsy (CP) is a general term that can refer to a variety of conditions. Cerebral palsy cases have a common characteristic of impairment in muscle coordination resulting in an inability to maintain normal posture and balance and to perform normal movement and skills. The type of muscle involvement can be described in 3 ways.

- *Hypotonic*- Describes muscle tone that is floppy or poor.
- *Hypertonic*-Describes muscle tone that is rigid or extreme.
- *Combination*-Where there is a combination of hypotonic and hypertonic muscle tone.

Cerebral palsy is caused by some injury or damage to the brain before, during, or after birth including some of the following factors:

- Genetic/inherited/chromosomal factors.
- Trauma to the brain when growing in the uterus.
- Infections experienced in the uterus.
- Lack of oxygen to the brain at birth.
- Bleeding inside the brain.
- Meningitis infection in childhood.
- Poisoning.
- Unknown causes (accounts for about ½ of all cases).

CP is not contagious, is non-progressive (but the condition may appear more severe as a child gets older and larger), is incurable but not fatal, and can improve with proper and early treatment.

Children with CP may also experience associated disabilities. Some common disabilities may include:

- Sensory impairments.
- Learning disabilities.
- Visual problems related to muscle imbalance.
- Seizures.
- Mental retardation.
- Communication/speech problems.
- Feeding difficulties and associated constipation.
- Hip dislocation, scoliosis and musculoskeletal contractures.

Some special care needs of children with cerebral palsy may include:

- Special equipment and therapy.
- Special chairs (including wheelchairs and positioning devices).
- Braces/splints.
- Special feeding utensils.
- Speech, physical, and occupational therapy techniques individualized to the child's need.

CHICKENPOX (varicella - zoster)

Incubation Period: Chickenpox symptoms usually appear 2-3 weeks or 13-17 days after exposure to the virus.

Signs and Symptoms: Chickenpox often begins with a skin rash consisting of small blisters all over the body that leaves scabs. Sometimes, chickenpox is accompanied by a mild fever. There may be eruptions at all stages at the same time. Sometimes the disease is very mild where only a few blisters are present.

Methods of Transmission: Chickenpox is spread through direct contact, droplet or airborne spread of secretions from the respiratory tract of an infected person. It may also be spread indirectly by contact with articles freshly soiled with the discharges from blisters or vesicles of an infected person.

Minimum Control Measures: Communicable Period: As long as 5 days but normally 1-2 days before blisters appear, and until all blisters are crusted and scabbed. If a person with chickenpox has altered immunity, he/she may be contagious for a longer period. **EXCLUDE** children or adults from attending an early childhood program until all of the blisters are crusted and scabbed.

There is a vaccine available for chickenpox called the varicella-zoster virus vaccine. It is recommended for children from 12 - 18 months of age. Children who have not been vaccinated previously and who lack a reliable history of disease should be vaccinated by thirteen years of age. Children who are under thirteen should receive one dose of vaccine. Adolescents and adults without disease history should receive two doses of vaccine four to six weeks apart.

Other Information: Notify parents if you suspect their child has been exposed to chickenpox. Children with chickenpox should not be given aspirin or salicylate-containing compounds because the administration of these products increases the risks of Reye syndrome. Acetaminophen may be used for fever control. Early signs and symptoms of Reye syndrome include a skin rash, vomiting and confusion. Medical care should be sought immediately if Reye syndrome is suspected.

Chickenpox is generally a more severe disease in adults and children with certain chronic diseases. Pregnant women who have not had chickenpox or have not been properly vaccinated against chickenpox should avoid exposure because illness could harm the fetus. If a pregnant woman suspects she has been exposed, she should consult her physician immediately. Once a person has had chickenpox, the virus remains in the body for life. Shingles, or zoster infections are not caused from exposure to chickenpox, but caused when the virus becomes active again in the body. Adults cannot catch shingles when exposed to a person with chickenpox.

***Report this illness by number of cases to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**

COLDS

Incubation Period: 12-72 hours, usually 48 hours. Some cold-causing viruses may have an incubation period of up to 7 days.

Signs and Symptoms: Signs and symptoms of a cold usually begin with an irritated throat, watery discharge from nose and eyes, sneezing, chills and general body discomfort.

Methods of Transmission: Depends largely on the virus causing the cold. These methods of transmission include airborne and direct contact with an infected person or contact with contaminated articles and/or surfaces.

Minimum Control Measures: 1) Good handwashing practices with warm running water, soap and disposable paper towels for both children and staff. 2) Proper cleaning and disinfecting of both the environment and toy. 3) Proper ventilation or airing out the room each day, including during cold weather. 4) Proper spacing of cots or sleeping mats so children will not be crowded together.

Control: EXCLUDE the child who does not feel well enough to participate in daily activities, or who has a fever. Otherwise, exclusion is not generally practical.

Other Information: Children and adults should wash hands after touching nasal discharge, such as after wiping a nose. Tissues should be disposable, used only once and thrown away. Children should be taught to turn and cough into their shoulders if they cannot cover their mouths and noses with a tissue.

CONGENITAL HEART DISEASE

Congenital heart disease is an incomplete or abnormal development of the heart in the unborn child. This results in a deformity of the heart at birth. The two most common categories of congenital heart defects are:

- Acyanotic (pink) babies: The skin coloring is not affected although a defect is present.
- Cyanotic (blue) babies: Unoxygenated or “blue” blood is circulated throughout the body resulting in a bluish cast to the baby’s skin.

The signs and symptoms of heart defects are dependent on the severity of the defect. Many infants with defects exhibit no signs or symptoms. The following are some signs and symptoms of heart defects you might encounter.

- Rapid breathing
- Rapid heart rate
- Tiring easily
- Sweating with feeding or even at rest or sleep
- Poor feeding (tires and is unable to take adequate quantities of formula)
- Failure to thrive (poor weight gain)
- Frequent respiratory infections

Significant delays in weight and height are common. Sometimes corrective surgery will improve growth. The effects of medication and dosages need to be carefully monitored. Any unexplained fever, headache, seizures, or other signs need immediate referral to a medical center.

Some special concerns for the early childhood provider include understanding medications the child is receiving and signs and symptoms to report. Early childhood providers must be trained in emergency procedures like CPR. Some conditions may require a child to have fluids restricted. Feeding may require concentrating calories for adequate nutrition and monitoring under direct supervision of a health care provider. The child who has a pacemaker or is taking medications that thin the blood should avoid potential dangers e.g., some playground equipment and rough contact sports.

CYTOMEGALOVIRUS (CMV)

Incubation Period: Incubation period is unknown.

Signs and Symptoms: Young children usually have no symptoms when they become infected with CMV. Occasionally, older children in child care usually will develop an illness similar to mononucleosis, with a fever, sore throat, enlarged liver, and malaise. However, there is no reason to exclude a child with CMV from your program.

Methods of Transmission: CMV is a virus with which most people eventually become infected. Children and staff in the child care setting are especially likely to be infected. CMV is spread from person to person by direct contact with body fluids such as blood, urine, or saliva. Thus, it may be spread through intimate contact such as in diaper changing, kissing, feeding, bathing, and other activities where a healthy person encounters the urine or saliva of an infected person. CMV can also be passed from the mother to the child before birth. Congenital infection with CMV can cause hearing loss, mental retardation, and other birth defects. Early childhood providers who are or may become pregnant should be carefully counseled about risks associated with the potential of exposing a developing fetus to cytomegalovirus.

Other Information: Female early childhood providers who expect to become pregnant should be tested for antibodies to CMV. If testing shows no evidence of previous CMV infection, reduce contact with infected children by working, at least temporarily, with children age 2 years or older, among whom there is far less virus circulation. These providers should observe careful handwashing, especially after each diaper change and/or contact with children's saliva.

***Note: Contact with children that does not involve exposure to saliva or urine poses no risk to a mother or child care provider and should not be avoided out of fear of potential infection with CMV.**

CROUP

Incubation Period: If caused by the parainfluenza virus, the incubation period is 2-6 days. If caused by the adenovirus, the incubation period is 2-14 days.

Signs and Symptoms: Croup usually begins with a fever, wheezing, difficult breathing, and agitation. Croup is often accompanied by cold-like symptoms such as an irritated throat, discharge from nose and eyes, sneezing, chills and general body discomfort.

Methods of Transmission: Croup is spread by contact with the respiratory secretions or airborne droplets from an infected person. Croup may also be spread indirectly by articles soiled with discharges of the nose and throat from an infected person. Croup is usually caused by the same group of viruses that cause colds.

Minimum Control Measures: Communicable Period: Varies depending on virus and the exact period is unknown although it is thought to be at least 24 hours before the onset of symptoms and last until 5 days after onset of symptoms.

Control: EXCLUDE the child with fever and/or difficulty breathing. *If a child has difficulty breathing, contact the emergency response system.* A child should be excluded any time the illness prevents the child from participating comfortably in the daily activities or if the child demands more attention than the staff can adequately give.

Other Information: Many times croup syndromes will be better during the day and worse at night. Croup occurs when there is an immune response in the lower respiratory tract to the same viruses that cause colds. No one understands why some children develop croup and others do not.

DIABETES

Diabetes¹ is a disease in which the body is unable to properly use and store glucose (a form of sugar). Glucose backs up in the bloodstream -- causing your blood glucose or "sugar" to rise too high. The two major types of diabetes are: In Type 1 (also called juvenile-onset or insulin-dependent) diabetes, your body completely stops producing any insulin, a hormone that enables your body to use glucose found in foods for energy. People with Type 1 diabetes must take daily insulin injections to survive. Type I diabetes usually develops in children or young adults, but can occur at any age. In Type 2 (also called adult-onset or non insulin-dependent) diabetes, the body produces insulin, but not enough to properly convert glucose into energy. This form of diabetes usually occurs in people who are over 40, overweight, and have a family history of diabetes

Classic symptoms of diabetes:

- Excessive thirst
- Excessive urination
- Excessive hunger
- Weight loss
- Fatigue
- Blurred vision
- High blood sugar level
- Sugar and ketones in the urine
- Vaginal yeast infections in girls (even infants and toddlers)

Guidelines for Babysitting Children with Diabetes²:

- Children who have diabetes are healthy and can do everything other children their age can do. They do have to be careful to eat the right amount of food at the right time to make sure their blood sugar does not go too high or too low.
- Ask the parents to tell you exactly what they want you to feed their child and at what time. If the child's blood sugar goes too low, you may wish to give him/her extra food. You should make sure you know the symptoms of low blood sugar and how the parents and health care provider want you to treat a low blood sugar.
- Have a written schedule of when the child needs to eat and what the child should eat and what to do if the child does not want to eat.
- If the child requires insulin, arrange for a family member or trained caregiver to come and give the child's insulin shot. If you must be the one to give insulin, insist on receiving the proper training on handling the medication, syringes, checking blood sugar levels and what to do if the child has problems. This training should be provided by a health care provider and/or certified diabetes educator. The local children's hospital or health department will be able to provide you with information on where and how to obtain training.

¹ "Diabetes Basics," *Children with Diabetes*, Saturday, May 11, 2002 06:13:35 PM
< http://www.childrenwithdiabetes.com/d_0n_000.htm > May 24, 2002

² "Babysitting Guidelines," *Children with Diabetes*, Thursday, May 23, 2002 04:00:19 PM
< http://www.childrenwithdiabetes.com/kids/d_02_900.htm > (May 25, 2002).

DIARRHEAL DISEASES*

Incubation Period: Varies depending on the causative agent or germ responsible for the disease.

Signs and Symptoms: Diarrhea begins with an increased number of stools compared with the child's normal pattern with increased water and/or decreased form. Diarrheal disease may be accompanied by nausea, vomiting, abdominal cramping, headache and/or fever.

Methods of Transmission: Person-to-person contact, in the majority of cases by fecal-oral route (ingesting very tiny amounts of fecal material from an infected person through contaminated hands or objects). Diarrhea may also be caused from improperly refrigerated, re-heated or contaminated foods.

Minimum Control Measures: Communicable Period: Varies depending on the causative agent. There is increased risk of disease for children in diapers and staff caring for these children.

Control: Always EXCLUDE children and staff with acute diarrhea. Children and staff should thoroughly wash hands after diaper changes and using the toilet, use disposable table liners and disinfect changing tables after each use. Caregivers who change diapers must not handle food. Separate diapered children from toilet-trained children.

Other Information: Common diarrheal infectious agents include *Campylobacter*, *Cryptosporium*, *Escherichia coli*, *salmonella*, and *Giardia lamblia*. If two or more children or staff members in one classroom experience diarrhea within a 48-hour period, an infectious agent should be suspected. NOTIFY YOUR LOCAL HEALTH DEPARTMENT. Stool testing and treatment may be necessary.

***Report any pattern of illness that is unusual, or an increased number of illnesses/cases.**

DIPHTHERIA*

Incubation Period: 2-5 days, occasionally longer.

Signs and Symptoms: Gradual onset over 1-2 days. Diphtheria usually occurs as a white or gray patch or patches of membrane surrounding inflammation and soreness in the throat or nose. Glands in the neck swell. A low-grade fever often accompanies symptoms.

Diphtheria can also occur as a skin, vaginal, eye or ear infection. However, this occurs very infrequently and is more common in tropical regions, among homeless persons and those living in crowded conditions. Diphtheria produces a toxin that may damage the heart and kidneys, which can be life-threatening.

Methods of Transmission: Primarily by contact with a person infected with diphtheria. Diphtheria may be transmitted by a symptomatic person or a carrier who shows no signs of the disease. Discharge from the nose, throat, eye or skin lesions may be infectious. In rare instances, diphtheria can be transmitted by contact with contaminated articles soiled by discharges from the lesions of an infected person.

Minimum Control Measures: Communicable Period: Varies, but usually 2 weeks or less and seldom more than 4 weeks. Effective antibiotic therapy and antitoxin are necessary for complete recovery. Effective antibiotic treatment promptly stops bacterial from shedding and spreading.

Control: Identify close contacts of a person diagnosed with diphtheria. Persons who have been exposed to diphtheria must seek medical attention immediately. Close contacts, *regardless of immunization status*, should be cultured for diphtheria and are often given antibiotic treatment to prevent illness.

Other Information: All children attending Utah schools and licensed early childhood programs/facilities are required by law to be immunized against diphtheria at the age of 2 months, 4 months, 6 months, 15 months and 4-6 years. Diphtheria is a life-threatening but vaccine-preventable disease. Infection can occur in immunized and partially immunized persons, as well as in those who are not immunized. The disease occurs more frequently and with more severe symptoms in persons who are not immunized properly.

***Report this illness to your local health department.**

DOWN SYNDROME

Down syndrome is a genetic condition where a child is born with extra chromosome 21 material. The extra chromosome material causes mental impairment and some physical characteristic features. Other genetic components and environmental factors influence the functioning and potential of the individual, often resulting in a wide range of ability.

Most children with Down syndrome have some degree of mental retardation. They have global developmental delay and loose, floppy joints. The instability of joints makes them prone to dislocation of the extremities and often instability of the upper spine. This affects approximately 15% of children with Down syndrome. These children may have to avoid certain activities such as gymnastics, diving or contact sports that might result in serious spinal cord injury. Children with Down syndrome are more susceptible to infections and autoimmune disorders. Upper respiratory tract infections are often associated with ear infections and pneumonia. Sometimes immunizations for pneumonia and influenza are given because of a decreased functioning of the immune system.

These children often have visual problems such as crossed or misaligned eyes, cataracts and may be nearsighted or farsighted. Hearing loss because of chronic ear infections are common. More than 40% of children with Down syndrome have some type of heart disease. The most common of these defects are malformations in the walls and valves that separate chambers of the heart. Surgery, medications, or both, may be needed. Heart disease may cause an infant or child to tire more easily during activities such as feeding or play. A special nutrition plan may need to be instituted to help correct poor weight gain in infancy, constipation and/or obesity.

It is often helpful for the early childhood program to be involved with the family, therapists, and school system in establishing an education plan and goals for the child and family.

EARACHE

Earaches are a common ailment in childhood. Earaches may be caused by a foreign body in the ear canal, swimmer's ear, fluid in the middle ear, or by a bacterial infection in the middle ear (otitis media). Symptoms of earache may include ear pain or pulling on the affected ear, fever, headache, runny nose, sore throat, cough, upper airway congestion, decreased appetite, nausea, vomiting, diarrhea, and/or a change in normal behavior.

Otitis media, or middle ear infection, occurs most frequently in children under 3 years of age because of the anatomy of a young child's middle ear. Certain risk factors are associated with an increased number of middle ear infections, including:

- Attendance in child care programs (increases exposure to germs)
- Exposure to environmental tobacco smoke
- Drinking bottles while laying down
- Previous ear infections

For these reasons, child care providers should take steps to minimize a child's risk for ear infections by promoting careful hand washing and good hygiene, by always holding children when they are drinking from a bottle, and by not permitting smoking near the children.

A child who is exhibiting the symptoms of an earache usually feels unwell and should be EXCLUDED until symptoms improve and they can participate in normal daily activities. Refer all children with symptoms of earache to their medical provider since otitis media is treatable with antibiotics.

EPILEPSY (SEIZURE DISORDER))

A seizure is described as a sudden unusual discharge of electrical energy in the brain. A seizure may be partial (focal), or may be generalized (involving most of the brain). The part of the body affected is determined by the part or parts of the brain affected. Seizures are the result of abnormal brain function, which may be either temporary or long-lasting. Individuals with repeated seizures have a seizure disorder, also called *epilepsy*.

Seizures may also result from a child having a fever. These are isolated incidents, and are not considered to be epilepsy.

Children with a seizure disorder have an increased risk of seizures after DPT (Diphtheria, Pertussis and Tetanus combination vaccine) or measles vaccine. Pertussis may be deferred and DT used. Measles vaccine continues to be recommended. Hearing and vision screening is important. Children taking Dilantin for seizure control need special oral hygiene because gum overgrowth can be a side effect of this drug. Blood tests are needed periodically to screen for drug toxicity. Drug interactions are common with some antihistamines, aspirin, antidepressants, and certain antibiotics when given to a child taking seizure medications. Risk of seizures is increased with fever, so observe closely and provide measures to reduce temperature. Work with the child's parents and health care provider to plan steps to be taken in the event of a seizure. As with asthma, a provider must document seizure activity, time, intervention taken, and circumstances surrounding the seizure, if appropriate.

FAILURE TO THRIVE

Failure to thrive (FTT) is a term used for a group of symptoms in malnourished children below the 5th percentile on growth charts for height and weight for age. FTT is characterized by failure to gain weight normally, slow development, feeding problems, sleep disturbances, and apathy. Possible contributing factors include metabolic disorders, genetic defects, prematurity, prenatal malnutrition, family social isolation, parental stress or depression, poverty, and homelessness. Early signs of FTT include poor weight gain, a decrease in fatty tissue, poor height gain, reduced rate of growth in head circumference, an increased susceptibility to infections and complications of certain disease conditions.

Some children are classified as FTT without knowing the cause. Concerns regarding diet and caloric intake are a primary concern for these children. Parents of children with FTT often feel guilty or inadequate as parents because their child is not developing normally. Supportive, understanding care of parents and child are necessary for all concerned. Develop a special care plan with the aid of the child's parents and health care provider.

A provider may need to learn to care for a nasogastric tube (a tube inserted into the stomach through a nostril) or a gastrostomy tube (a tube that is surgically placed into the stomach) when caring for a child with FTT. Special training and backup support are required if caring for a child with this type of medical intervention.

FIFTH DISEASE **(parvovirus B19, erythema infectiosum)**

Incubation Period: The incubation period for Fifth disease is generally 7 days, but may occur between 4-20 days from time of exposure.

Signs and Symptoms: Marked redness of cheeks ("slapped-face" appearance) that is often followed in 1-4 days by a red, lace-like rash on the trunk and body. The rash might appear to change or re-appear for 1-3 weeks with exposure to sunlight or increases in the environmental temperature, although not all infected persons have a rash. Children may have a slight fever or feel unwell. It is estimated that about 50% of adults have had previous infection and are immune. In adults, the rash is often absent, but arthritis lasting for days to months may occur. In 25% of infected adults, the person may not show any symptoms. Persons with immunodeficiencies may experience chronic anemia.

Methods of Transmission: Primarily, the disease is spread by direct contact, droplet, or airborne spread of respiratory secretions, by transfusion of blood or blood products (very rare) or from a mother to her fetus.

Minimum Control Measures: Communicable Period: The exact period is unknown, but children are thought to be most infectious before the rash breaks out. The disease is not communicable after the rash appears. Persons with absence of normal cell development are communicable up to one week after the onset of symptoms. Immunosuppressed patients may be infectious for months to years.

Control: EXCLUDE the child with fever who feels ill. Otherwise, exclusion is not generally practical. Proper handwashing and disposal of tissues can help minimize transmission.

Other Information: Some pregnant women have miscarried after becoming infected with parvovirus B19. However, the risk for this occurring is relatively low. Pregnant women who subsequently find that they have been in contact with children during the incubation period (4-20 days before signs or symptoms) may want to follow up with their health care provider.

Although women who work primarily with children are at increased risk of infection, a routine policy to exclude pregnant women from the workplace when parvovirus B19 is occurring is not recommended. Occupational settings are not the only place where transmission may occur. Prevention methods to avoid infection include proper handwashing, teaching children to cover their mouth when coughing, and disposal of tissues for respiratory secretions.

HAND, FOOT, AND MOUTH DISEASE
(enteroviral vesicular stomatitis with exanthem)

Incubation Period: 3-5 days.

Signs and Symptoms: Small painful blisters in the mouth, on the gums and tongue. Blisters may also occur on the palms, fingers and soles of the feet. Usually, the blisters persist from 7-10 days. A person with hand, foot, and mouth disease may be asymptomatic (with no symptoms). This disease occurs primarily in children.

Methods of Transmission: Direct contact with nose and throat discharges, respiratory droplets or feces from an infected person.

Minimum Control Measures: Communicable Period: During the illness and perhaps longer because this virus persists in the stool for several weeks.

Control: EXCLUDE the child who feels unwell or has a fever. Wash hands thoroughly after using the toilet, assisting a child to use the toilet, and changing diapers and nose blowing. Discard used tissues in the proper place. Use tissues only once.

HEAD LICE (pediculosis)

Incubation Period: The nits (eggs) of lice may hatch in 1 week. Sexual maturity is reached approximately 8-10 days after hatching.

Signs and Symptoms: Infestation of the head and hairy parts of the body with adult lice, larvae and nits. This results in itching and irritation of the scalp and skin. Female lice are generally the size of a sesame seed. Eggs or nits are tiny tan or pearl-gray specks that attach to the hair shaft close to the scalp.

Methods of Transmission: Almost exclusively by direct contact with an infested person. Transmission can occur from sharing hats, combs and brushes, or other articles recently in contact with the head of an infested person. Lice DO NOT jump or fly. Hair length does not influence infestation.

Minimum Control Measures: Communicable Period: From time of infestation until after completion of initial treatment.

Control: EXCLUDE from attendance until after first treatment with a medicated product, such as pyrethrin (Rid® and others). Person must be re-treated in 7-10 days in order to kill remaining nits. Follow the manufacturer's directions carefully. Remove the nits by using a fine-tooth comb. The nits can be loosened before combing by applying a damp towel to the scalp for 30 to 60 minutes, or by soaking the hair with white vinegar followed by applying a damp towel to the scalp for 30 to 60 minutes. Commercial rinses containing 8% formic acid may also be used to loosen the nits. All products must be used according to the manufacturer directions. Lice cannot live away from the host for more than 48 hours. Eggs do not survive away from the scalp for more than 7 days.

Thoroughly vacuum the environment. Insecticide sprays have not been proven useful. Laundering washable items in hot water and/or using the hottest drying cycle will destroy lice and nits. Non-washable items, such as stuffed toys, may be dry cleaned or placed in tightly sealed plastic bags for 10 days in order to destroy nits. Soak combs and brushes in hot water for 10 minutes or wash with pediculicide shampoo.

Other Information: Lindane-containing compounds (Kwell) should not be used on infants or small children or by women who are pregnant or nursing. The local health department should be notified of outbreaks of lice. When a child is found with head lice, all contacts and family members of the child should be examined carefully. Those infested should be treated.

HEPATITIS A*

Incubation Period: 15-50 days; normally 28-30 days.

Signs and Symptoms: Preschool-aged children infected with the hepatitis A virus usually have few or no symptoms. Cases that occur in a day care sometimes go unrecognized until a family member suddenly develops symptoms. Symptoms may include fever, feeling unwell, and lack of appetite, abdominal discomfort with nausea and vomiting, fatigue, tea-colored urine, and onset of jaundice (yellowing of the skin and/or whites of the eyes). Infected children sometimes have abdominal discomfort, a general feeling of unwellness, lack of appetite and/or jaundice.

Methods of Transmission: Person-to-person contact by the fecal-oral route (ingestion of tiny amounts of fecal particles from contaminated objects or hands). The virus is excreted in the infected person's feces for 1-3 weeks before onset of symptoms. The virus is excreted 1-2 weeks before symptoms appear. Maximum infectivity occurs the latter half of the incubation period and continues until a few days after the appearance of symptom.

Outbreaks have occurred from infected food handlers and from eating raw or undercooked shellfish from sewage or fecal-contaminated waters. Hepatitis A is more frequently spread in day care centers or other settings where diapered children attend. Risk of transmission is lower in the school setting, generally, because children are toilet trained.

Minimum Control Measures: Communicable Period: Most communicable for 1-2 weeks before the onset of symptoms and diminishes for a few days after the onset of jaundice.

Control: EXCLUDE from attendance until the fever is gone and at least 1 week after the illness. The ill person should be under a physician's care. Prompt administration of immune globulin (IG) to contacts helps prevent the spread of hepatitis A. Education of staff and children about good hygiene measures, including frequent handwashing, is essential for the control of hepatitis A. A vaccine for prevention of the hepatitis A virus is available. Contact your local health department or your family physician for more information on the hepatitis A vaccine.

Other Information: Contact the local health department for help in controlling the disease and for immune globulin (IG) recommendations. Handwashing for all persons is vitally important to prevent acquiring or transmitting hepatitis A. Persons caring for diapered children are at increased risk for acquiring the disease. They must exercise caution by practicing good handwashing techniques. The diaper changing area should be cleaned and disinfected after each use, not just during a disease outbreak.

***Hepatitis A should be reported to your local health department.**

HEPATITIS B*

Incubation Period: As long as 45-180 days; averages 60-90 days.

Signs and symptoms: The disease is usually mild in children. Symptoms develop slowly and may include loss of appetite, stomach pain, nausea and vomiting. Sometimes skin rashes, joint pains, fever and jaundice (yellowing of the skin and whites of the eyes) develop.

Methods of Transmission: Hepatitis B may be spread by the following ways: 1) through sexual activity, 2) by direct contact with infected blood and body fluids, 3) an infected mother may transmit the virus to her baby during birth and 4) by using contaminated sharps or needles. It is unlikely, but hepatitis B can be transmitted by biting (through saliva) if skin is broken. It is not transmitted by the fecal-oral route.

Minimum Control Measures: Communicable period: An infected person can spread the virus for several weeks before symptoms appear and as long as the person is ill. Persons who develop lifelong infections may spread the virus for their entire lives.

Control: A child infected with hepatitis B should be under the care of a physician. Although the infected child does not need to be excluded for the entire period of the infection, a physician's referral is needed for the child to return to day care. If a child is unusually ill or exhibiting aggressive behaviors such as biting, then exclusion may be necessary. Children who are chronic carriers do not need to be excluded as long as they do not display unusually aggressive behaviors (biting) that may place other children at risk. It is recommended for all household contacts of a hepatitis B case to be immunized. Hepatitis B is a vaccine-preventable disease. Vaccination is recommended for all infants.

Other Information: Use barrier methods such as gloves to prevent contact with body fluids. There is no specific treatment for infection with the hepatitis B virus so prevention is extremely important.

***Report this illness to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases. For more information, contact your local health department.**

HERPES SIMPLEX VIRUS (HSV) (Cold sore)

Incubation Period: 2-12 days.

Signs and Symptoms: Primary infection is usually without symptoms when it occurs in early childhood. If the symptoms do occur, lips and mucous membranes of the mouth are most often affected. Painful blisters (fever blisters or cold sores) quickly form, turn pustular and develop a crusted scab. Oral lesions may appear as small ulcers. Healing is completed within a few days. The blister usually recurs in the same spot. In newborns, congenital infection produces a spectrum of diseases ranging from localized skin lesions to severe symptoms involving the whole body.

Methods of Transmission: Direct contact with the virus in saliva of a carrier is the principle mode of spread. The virus may be spread from hands contaminated with saliva containing the virus. Genital herpes is spread by sexual contact.

Minimum Control Measures: Communicable Period: The virus can be present for weeks in saliva and is most communicable when lesions are blister-like. The infected person may shed the virus when asymptomatic (without any symptoms).

Control: Excluding a child with HSV is not appropriate. HSV is very prevalent in the community. It may commonly be transmitted in families. If a child is symptomatic, exclusion may only be necessary if the child feels very uncomfortable. Care should be taken to disinfect objects placed in children's mouths before they are used by other children in the center. Good handwashing practices are essential when children or staff are infected with HSV.

If a child has open blisters on gums and inside of the mouth, and cannot control oral secretions or has biting behaviors, the child should be EXCLUDED until the condition is resolved.

Other Information: Caregivers with HSV lesions should take special care with hygiene measures, such as handwashing. The person with HSV lesions should not kiss children/infants.

HUMAN IMMUNODEFICIENCY VIRUS*
ACQUIRED IMMUNODEFICIENCY SYNDROME
HIV/AIDS

Infection with the human immunodeficiency virus (HIV) results in progressive deterioration of the immune system, ultimately leading to opportunistic infections, malignancies, and other conditions representative of the acquired immunodeficiency syndrome (AIDS).

Incubation Period: Has a window period of 6-12 weeks during which an infected person will usually test negative. The latency period includes the window period and can last 7-13 years before symptoms of AIDS appear. Generally, a person will test positive for HIV within the first 6-12 weeks after exposure.

Signs and Symptoms: A person infected with the HIV virus may show no identifiable signs or symptoms before he/she develops AIDS. Some general symptoms of AIDS may include prolonged fever, night sweats, persistent swollen lymph nodes, chronic diarrhea and unexplained weight loss.

Methods of Transmission: HIV is transmitted in three ways: 1) through sexual intercourse with an infected person; 2) through contact with infected blood or body fluids to a mucous membrane or open or broken skin; and 3) from an infected mother to her child through pregnancy, birth or breast-feeding. Articles contaminated with blood or infected body fluids may also transmit HIV, for example, by sharing needles. The major body fluids that are implicated in the transmission of HIV are blood (or any body fluid contaminated with blood), semen, and vaginal/cervical secretions. HIV cannot be transmitted through tears, saliva, urine or feces. However, it is important to use barrier precautions such as gloves for all body fluids because these fluids may transmit other diseases.

Minimum Control Measures: Communicable Period: From the moment a person is infected, he or she becomes infectious for life and can transmit the virus to others.

Control: Use barrier methods such as single-use disposable gloves to avoid contact with blood or body fluids. Wear disposable gloves when taking care of injuries. Wash hands thoroughly after removing gloves.

Other Information: HIV is primarily a sexually transmitted disease. However, there are individuals who have been infected in other ways, such as through occupational exposure, I.V. drug use, or through birth by an infected mother. Infectious fluids can enter the body through chapped, broken or non-intact skin, needlesticks, or splashes to the mucous membranes of the eyes, nose or mouth. It is essential to follow body substance precautions at all times. This means using barrier methods, such as gloves, gown, goggles etc., if contact with any body fluid is anticipated.

***Report this illness to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases. For more information, contact your local health department.**

IMPETIGO

Incubation Period: 1-10 days, occasionally longer or indefinite.

Signs and Symptoms: Blister-like lesions on the skin, which later ooze and develop into crusted sores. They appear in an irregular pattern. The sores may spread into a red, oozy rash that gets a clear or honey-colored crust. Itching is common.

Methods of Transmission: Direct contact with draining sores. Contaminated hands are the most frequent method for spreading infection. Often, tiny breaks in the skin allow bacteria in to cause infection. Some asymptomatic people carry the bacteria and can easily infect others if their skin is broken. Staphylococcal or streptococcal bacteria can cause impetigo.

Minimum Control Measures: Communicable Period: As long as sores continue to weep or drain.

Control: EXCLUDE from attendance until 24 hours after antibiotic treatment has been started, until sores are dried or until sores can be covered with a bandage.

Other Information: Early detection and adequate treatment are important in preventing spread. Medical treatment is necessary. Oral antibiotics are the preferred treatment for multiple lesions. Any person with lesions should avoid contact with newborn babies. The infected individual should use separate disposable towels and washcloths. Place dressings in a disposable bag and immediately put in the garbage. Staphylococcal infections are reportable to the local health department by number only.

INFECTIOUS MONONUCLEOSIS

Incubation Period: The usual incubation appears to be 30 to 60 days.

Signs and Symptoms: Infectious mononucleosis is caused by the Epstein-Barr virus (EBV). EBV is believed to be present in saliva. Most young children infected with EBV show no symptoms, unlike older children and adults, who may have fever, fatigue, enlarged neck lymph nodes, and inflamed throat and tonsils.

Methods of Transmission: Infectious mononucleosis is through contact with the saliva of an infected person. The virus spreads more rapidly among children in closed or overcrowded conditions. Most adults have been exposed to EBV by the age of 18 years and are immune.

Minimum Control Measures: The infected person may return to the early childhood setting when he or she is able to participate in usual activities. Make sure all children and adults do not share eating or drinking utensils. Make sure all children and adults follow good handwashing practices.

Other Information: Humans are the only source of EBV. Close personal contact is usually required for transmission. Infection frequently is contracted early in life.

INFLUENZA* **(flu)**

Incubation Period: Usually 1-5 days.

Signs and Symptoms: Sudden onset of an acute viral disease with symptoms of fever, chills, headache, sore muscles, and a general feeling of unwellness associated with runny nose, sore throat, and cough. Cough is often severe and lasts longer than other symptoms that generally subside in 2-7 days. Nausea, vomiting and diarrhea may occur in children.

Methods of Transmission: Direct contact with respiratory secretions or droplets from an infected person. Indirect contact with articles freshly soiled by discharges from an infected person. The virus is excreted in discharges from the nose and throat, and lives in dried mucus for several hours.

Minimum Control Measures: Communicable Period: Probably 3-5 days after onset of symptoms; can be up to 7 days after the onset of symptoms in younger children. Control: EXCLUDE child who has fever or feels unwell. Otherwise, exclusion is not generally practical.

Other Information: Influenza is generally more severe in very young children who have had no prior exposure. Sometimes influenza resembles a cold or other respiratory virus. Routine immunization is not recommended for healthy infants and children. Annual immunizations are effective in preventing adult infections. Influenza can be severe in elderly populations. Physicians may prescribe Ramantadine for exposed individuals to prevent or modify the effect of influenza A during an outbreak. Individuals exposed to influenza should consult with their physicians.

Children must not be given aspirin or salicylate containing compounds because administration of these products increases the risks of subsequent Reye syndrome. Acetaminophen may be used for fever control. Reye syndrome is a rare but life-threatening illness. Early signs and symptoms are vomiting and confusion. Medical care should be sought immediately if Reye syndrome is suspected.

***Report the number of diagnosed cases to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**

MEASLES*
(rubeola, hard measles, red measles)

Incubation Period: 7-18 days from exposure to onset of fever, generally 10 days; about 14 days until rash appears.

Signs and Symptoms: The first symptoms of measles resemble a cold with cough, fever of 101°F or greater, runny nose, and/or red, watery eyes. A red, blotchy rash follows a few days later around the ears and hairline and spreads to cover the face, spreading to the trunk and arms by the second day. Fever usually disappears one or 2 days after the rash. The rash turns from pink to reddish brown and lasts about 5 days. Peeling of the skin is common. The disease is more severe in infants and adults than in children.

Methods of Transmission: Direct contact with secretions of nose and throat from an infected person. Measles can spread by airborne droplet or by articles freshly soiled with respiratory secretions from an infected person. Measles is highly contagious disease, but can be prevented through proper immunization.

Minimum Control Measures: Communicable Period: 1-2 days before the onset of cold-like symptoms, 4-5 days before the onset of the rash to 4 days after the rash appears; measles is most infectious just before the rash appears. Communicability is minimal after the second day of the rash.

Control: EXCLUDE from attendance for at least 4 days after the rash appears. During an outbreak, susceptible persons should be excluded from attendance until they are immunized or until two weeks after onset of the last case of measles in the facility. Standard control measures for measles suggest that the measles vaccine will protect exposed persons if given within 72 hours of exposure.

Other Information: All children attending Utah schools and licensed child care facilities are required by law to be immunized between the ages of 12-15 months and again between 4-6 years. Measles is a vaccine-preventable disease. Re-immunization is recommended for persons born after 1957 and vaccinated before 1970.

***Notify the local health department immediately if a case occurs in an early childhood program or school.**

MENINGOCOCCAL INFECTIONS*
(Bacterial meningitis, *Neisseria meningitidis*, *Haemophilus influenzae*)

Incubation Period: Unknown; probably short, less than 4 days.

Signs and Symptoms: The symptoms appear suddenly with onset of fever, chills, intense headache, nausea, vomiting, stiff neck, and sometimes rash. Behavioral changes may occur, including irritability or sluggishness. The disease may progress to seizures and a coma. Meningococcemia, a blood infection, usually involves fever and a rash.

Signs and symptoms of meningitis are a medical emergency. Medical attention must be received immediately. Although anyone can get the disease, it appears most frequently in those younger than five years of age. It is important to treat household and day care contacts as soon as possible with preventive drugs, preferably within 24 hours. Contact the local health department for more information.

Methods of Transmission: Direct contact with droplets and secretions from the nose and throat of an infected person who might be asymptomatic (without symptoms).

Minimum Control Measures: Communicable Period: Patients are considered infectious for as long as the bacteria are present in the nose and throat and until 24 hours after antibiotics are started.

Control: EXCLUDE from attendance until adequately treated. The child may return to the center when he/she feels well enough after discharge from hospital and treatment. Antibiotic therapy for contacts is indicated. *Haemophilus influenzae* type B is a vaccine-preventable disease. All children attending licensed child care facilities are required by law to get the Hib vaccination series. Children must be immunized at 2, 4, 6, and 15 months. The Hib vaccine is not required and is not recommended for children over 60 months (5 years).

Other Information:

***Notify the health department immediately if a case occurs. Careful observation of exposed household, school or early childhood program contacts is essential. Exposed individuals who develop a fever should receive prompt medical evaluation. Household and close day care contacts need to receive antibiotics.**

MUMPS*

Incubation Period: 12-25 days, commonly 18 days.

Signs and Symptoms: Usually fever, often with headache, chills, and discomfort, usually followed by painful swelling or tenderness under the jaw or in front of the ear.

Methods of Transmission: By droplet spread or direct contact with saliva from an infected person. The virus is also found in urine.

Minimum Control Measures: Communicable Period: 7 days before onset of swelling and up to 9 days after swelling occurs. The virus is most communicable 2 days before the onset of swelling.

Control: EXCLUDE from attendance for at least 9 days after swelling first occurs or until swelling is gone.

Other Information: All children attending Utah schools or early childhood programs/facilities are required by law to receive mumps vaccine between the ages of 12-15 months and again between 4-6 years. Mumps is a vaccine-preventable disease. The disease may have serious complications. A pregnant woman with a mumps infection during the first trimester of pregnancy may have an increase risk of spontaneous abortion. Adults born before 1957 are considered immune even if they did not have the disease or the vaccine as a child.

***Report the number of diagnosed cases to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**

PINK-EYE (Conjunctivitis)

Incubation Period: Viral infection varies from 12 hours to 12 days. The incubation for bacterial infection is usual 1-3 days.

Signs and Symptoms: Redness of eye(s), watery, white or yellow discharge from the eye, matted eyelashes, burning or itching eyes.

Methods of Transmission: Contact with discharges from the eyes or upper respiratory tract of an infected person. Eyes can become infected from contaminated fingers, clothing and other articles, including shared towels or eye makeup.

Minimum Control Measures: Communicable Period. For bacterial infections, this is normally 24 hours after the physician starts treatment. Conjunctivitis caused by viruses is not shortened by antibiotic treatment and may be contagious until the watery, white or yellow discharge has ceased. Exclusion for long periods is often impractical.

Control: Isolate child with eye discharge. EXCLUDE the child from attendance until examined by a physician and the child is approved for readmission

Thorough handwashing and disinfecting of contaminated articles will help to prevent the spread. Eliminate shared articles, such as common towels. Do not share eye makeup or eye drops.

Other Information: Distinguishing between viral and bacterial conjunctivitis requires costly laboratory tests. Many physicians treat all cases with antibiotics in order to prevent serious complications. Encourage children not to rub their eyes. Exclusion of the child with pink-eye and good handwashing practices help to prevent the spread in early childhood programs.

PINWORMS (enterobiasis)

Incubation Period: 2-6 weeks.

Signs and Symptoms: Tiny parasitic worms that live in the lower intestine. Symptoms include anal itching with disturbed sleep, irritability, and local irritation due to scratching. The female worms resemble short white threads. They lay their microscopic eggs around the anus at night. Therefore, itching may be more intense at night. Pinworm infections are common in school-age children. Pinworms do not cause bed-wetting or teeth grinding.

Methods of Transmission: Direct transfer of eggs from anus to mouth. Eggs may get on hands from articles contaminated with eggs of the parasite, such as clothing or bedding and passed to the mouth when eating or touching the mouth with un-washed hands. Pinworms that infect animals cannot be transmitted to people.

Minimum Control Measures: Communicable Period: As long as the worms/eggs are present.

Control: The child should receive medical attention. Utah child care rules require EXCLUSION of the child until after the first treatment. Proper handwashing is necessary before eating and after toilet use. Re-infection is common. Thoroughly clean the bathroom and vacuum the house or facility. Change bed linens and bath towels. Eggs survive less than 2 weeks outside of the host.

Other Information: Close contacts, such as siblings, should be checked and treated if necessary. Linens, clothing and bedding should not be shared and should be washed frequently. Pinworm infection may be present without symptoms. Keep fingernails trimmed short. Discourage nail biting. Showers in the morning are preferred to baths. Consult the local health department for help in controlling outbreaks of the disease within the center. Make sure children wash their hands after each toilet use and before meals.

POLIO

Incubation Period: For the onset of paralysis in paralytic polio, the incubation period is usually 7 to 21 days, but occasionally as short as 4 days.

Signs and Symptoms: Polio attacks the nervous system and can cause paralysis in legs or other parts of the body. Polio is still common in other parts of the world where many people remain unvaccinated.

Methods of Transmission: Polio is caused by the poliovirus. It gains entry to the body by fecal-oral spread and can infect the intestinal tract. It can be excreted and may be spread through the feces. Poliovirus occurs only in humans.

Minimum Control Measures: All children should be immunized against polio with doses of the polio vaccine at 2, 4, and 6 months and at 4 to 6 years of age. Inactivated Polio (IPV) is currently recommended for all doses of the polio series, and is the only vaccine now being distributed in the United States. If a child receives the IPV, there is no risk of shedding the virus. However, children or adults who recently immigrated into the United States may have been vaccinated with the live virus vaccine, referred to as Oral Poliovirus Vaccine (OPV). When children and adults are vaccinated using the live polio vaccine, they may shed live polio vaccine virus in their saliva or feces for several weeks after receiving the vaccine. A provider who is not immune to polio or whose immune system is compromised for any reason should not have contact with the saliva or feces of a person who received the OPV. A person who has received the OPV may shed the virus for up to 6 weeks.

Other Information: Polio has become rare in the United States. The last reported case due to the poliovirus occurred in 1979 during an epidemic in a religious sect that had refused immunizations. However, if a provider has reason to believe a child or adult may be infected with polio, they should contact the local health department, the child's parents and a health care provider IMMEDIATELY.

PREMATURITY

Prematurity, or preterm, generally refers to infants born before 38 weeks' gestation. (Full-term gestation is 38 – 40 weeks.) The term “low birth weight” is used almost synonymously with the term “premature” and refers to infants weighing less than 5.5 pounds (2500 grams).

Catch-up growth occurs within the first year to after 3 years of age. Special vision and hearing testing should be done in the hospital before the child is discharged, and may need to be repeated as needed. Tooth eruption may be delayed. Infants who are born prematurely may have an increased risk of infections due to immature immune systems. When child care is needed, small day-care programs are recommended in order to minimize the potential for exposure to diseases. A parent should discuss this with their health care provider and child care provider

Children born prematurely may require hospitalization for an extended period of time, and need invasive medical procedures to save their lives. For this reason, the child may develop feeding problems such as oral hypersensitivity (inability to tolerate touch near and in the mouth) and gastroesophageal reflux (frequent spitting up). The premature infant may also have disorganized sleep patterns and an increased risk of developmental delay and educational challenges. Developmental testing may be necessary.

A provider can help encourage growth and development of a child born prematurely through planned activities and educational opportunities. When considering appropriate activities for the child's developmental level, consider the number of weeks of prematurity and adjust the child's age accordingly. For example, if a child is born 8 weeks premature, and is now 16 weeks old, the child's development would be considered normal if he/she were functioning on an 8-week-old level. This guideline should be considered until the child is about 12-14 months of age.

RESPIRATORY SYNCYTIAL VIRUS (RSV)

Incubation Period: ranges from 2 to 8 days; 4 to 6 days are the most common.

Signs and Symptoms: RSV causes infections of the upper respiratory tract (like a cold) and the lower respiratory tract (like pneumonia). It is the most frequent cause of lower respiratory infections, including pneumonia, in infants and children under 2 years of age. Almost 100 percent of children in child care get RSV in the first year of their life, usually during outbreaks during the winter months. In most children, symptoms appear similar to a mild cold. About half of the infections result in lower respiratory tract infections and otitis media. A RSV infection can range from **very mild to life threatening or even fatal**. Children with heart or lung disease and weak immune systems are at increased risk of developing severe infection and complications. RSV causes repeated symptomatic infections throughout life.

Methods of Transmission: RSV is spread through direct contact with infectious secretions or by touching a surface contaminated with the virus. A young child with RSV may be infectious for 1 to 3 weeks after symptoms subside.

Minimum Control Measures: The most effective preventive measure against the spread of RSV and other respiratory viral infections is careful and frequent handwashing. Proper cleaning, sanitizing and disinfecting will also decrease the spread of germs. Because this virus can survive for while outside of the body, extra consideration should be given when cleaning doorknobs, light switches, handles, etc. Once one child in a group is infected with RSV, spread to others is rapid. Frequently, a child is infectious before symptoms appear. Therefore, an infected child does not need to be excluded from child care unless he or she is not well enough to participate in usual activities.

Other Information: Humans are the only source of infection. The virus can persist on environmental surfaces for many hours and for half an hour or more on the hands. RSV usually occurs in annual epidemics during the winter and early spring, and it infects essentially all children during the first 3 years of life.

RINGWORM OF THE SCALP, SKIN OR FEET **(dermatophytosis, tinea, athlete's foot)**

Incubation Period: **Scalp:** 10-14 days; **Skin:** 4-10 days; **Feet:** unknown.

Signs and Symptoms:

- Scalp: Scaly patches of temporary baldness. Infected hairs are brittle and break easily. This condition occurs mainly in children between ages 2-10.
- Skin: Reddish, flat, inflamed ring-like rash that may itch or burn and may be dry and scaly, moist, or crusted.
- Feet: Scaling or cracking of the skin, especially between the toes, or blisters containing a thin, watery fluid. Itching is common. This is an unusual occurrence among younger children. Also called athlete's foot.

Methods of Transmission: By direct contact with an infected person or animal. Indirectly, by contact with articles and surfaces contaminated by an infected person or animal.

Minimum Control Measures: Communicable Period: As long as the rash or lesions are present, or the fungus persists on contaminated materials.

Control: EXCLUDE the child until medical treatment begins. Eliminate activities that involve skin-to-skin contact until fungus is completely gone. Refer children or adults with a suspicious rash for a medical evaluation with diagnosis and treatment immediately.

Other Information: Preventive measures include not sharing personal items such as hair care articles and clothing. Personal hygiene is important--skin areas should be dried thoroughly after washing. All day care and household contacts, pets and farm animals should be inspected and treated if infected. Do not share brushes or combs with pets. Public facilities such as locker rooms and pools should not be used when an individual is infected with ringworm. Wash and disinfect bathroom surfaces and toys daily. Use disposable tissues and towels for wiping and washing children. Never use the same towel or tissue on more than one child. Notify parents and staff if more than one person in the program develops ringworm for early detection of other cases.

ROSEOLA **(exanthem subitum)**

Incubation Period: About 10 days.

Signs and Symptoms: Sudden onset of a high fever, sometimes as high as 106° F that lasts 3-5 days and then quickly disappears. After fever subsides, a rash appears. The rash consists of small, separate rose-pink spots that begin on the chest and abdomen and usually last only 1-2 days. Most cases are in children 6 months to 3 years old.

Methods of Transmission: Unknown. Humans are the only known host.

Minimum Control Measures: Communicable Period: Unknown. Humans are the only known host.

Control: EXCLUDE a child with fever. A child with rash and no fever may return to day care.

Other Information: Usually occurs in children under 4 years of age, most commonly around age 2. Immunity follows illness. Roseola is caused by the human herpes virus-6 (HHV-6) or a virus similar to HHV-6, therefore, antibiotics are not recommended for treatment. Unrecognized infections can occur.

RUBELLA*
(German measles)

Incubation Period: 14-23 days, usually 16-18 days.

Signs and Symptoms: A skin rash lasting 1-3 days may or may not occur. If a rash occurs, it begins on the face. Other symptoms may include mild fever of less than 101° F, cold symptoms and lymph nodes at the back of the head, behind the ear, and along the back of the neck are often enlarged. Young children may be asymptomatic (without symptoms).

Methods of Transmission: Direct contact from an infected person or indirectly by contact with articles freshly soiled by respiratory secretions from an infected person. The virus is excreted in discharges from the nose, throat and urine.

Minimum Control Measures: Communicable Period: Communicable from 1 week before and at least 4 days after the onset of the rash.

Control: EXCLUDE the child from attendance for 7 days after the onset of rash. Infants born with congenital rubella syndrome should be evaluated before being admitted to the center as they may shed virus over a prolonged period after birth.

Other Information: All children attending Utah schools and licensed early childhood programs/facilities are required by law to be immunized between the ages of 12-15 months and again between 4-6 years. Rubella is a vaccine-preventable disease. The disease, while mild in children, is very serious for unborn babies if it is contracted by a pregnant woman. Pregnant women, whether or not immunized, should immediately consult their physicians if they have been exposed to rubella.

***Report this illness to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**

SCABIES

Incubation Period: 2-6 weeks before itching begins in a person with no previous exposure. Persons with prior exposure develop symptoms within 1-4 days.

Signs and Symptoms: Scabies is a skin infestation caused by microscopic parasites called mites. The mites burrow under the skin creating small raised areas of skin containing fluid or tiny paths under the skin. These burrows resemble wavy lines and appear frequently on finger webs or on the inside of the wrists and elbows. A rash may occur anywhere on the body, regardless of the area of infestation. Itching is intense, especially at night.

Methods of Transmission: Direct skin-to-skin contact with an infested person. Less commonly, transmission occurs through contact with contaminated clothing, bedding or other articles.

Minimum Control Measures: Communicable Period: From the time of infestation until after mites and eggs are destroyed. Ordinarily, mites and eggs are destroyed after 1 or 2 courses of treatment, 1 week apart. Generally, a person is treated on the first day. On the second day a bath or shower is taken and all linens, underclothes and bedding are changed. Carpets and furniture should be vacuumed. Sometimes itching will persist for 1-2 weeks after treatment. This should not be taken as a sign that treatment has failed. Overtreating should be avoided because the medication can be toxic. Follow the directions on the package exactly.

Control: A physician should confirm diagnosis of scabies. If a single case has been confirmed, EXCLUDE the child from attendance until the day after treatment is started. Individuals who have had direct contact with the infested child, including family members, should be evaluated and, if necessary, treated.

Other Information: A single infestation in a family is uncommon. Scabies usually infect the whole family. Bedding and clothing worn next to the skin during 72 hours before treatment should be laundered on the hot cycle. Store difficult to wash items in sealed plastic bags for 5 days. Disinfecting the general environment is not necessary. Consult the local health department for help in controlling outbreaks of this disease. In addition, report any pattern of illness which is unusual or an increased number of illnesses/cases.

SEXUALLY TRANSMITTED DISEASES* **(gonorrhea, syphilis, chlamydia)**

Incubation Period:

Gonorrhea: 2-7 days, sometimes longer.

Syphilis: 10 days - 3 months, usually 3 weeks.

Chlamydia: 7-14 days or longer.

Signs and Symptoms:

Gonorrhea: In symptomatic males, a pus-colored discharge drains from the penis within an average period of 3-5 days. Although often asymptomatic in females, common symptoms may include burning, vaginal discharge and itching.

Syphilis: A tiny, painless ulcer develops at the site where the microorganism enters the body. A painless, firm lymph node commonly follows. Generalized secondary eruption occurs with mild symptoms including a rash, sore throat and weight loss.

Chlamydia: In males, symptoms include discharge, burning during urination and urethral itching. In females, discharge, itching and inflammation may occur in the genital tract and may result in permanent damage to the reproductive system. Asymptomatic infections may occur in both males and females.

Methods of Transmission: Sexually transmitted diseases are transmitted through sexual contact or from mother to baby during childbirth.

Gonorrhea: Direct contact with the discharge of mucous membranes of an infected person; usually from sexual contact.

Syphilis: Direct contact with the secretions from the ulcers; usually during sexual contact.

Chlamydia: Direct contact by sexual intercourse.

Minimum Control Measures: Communicable Period:

Gonorrhea: May extend for months in untreated individuals who might be asymptomatic; ends within hours of appropriate drug therapy.

Syphilis: Variable and indefinite during primary and secondary stages. Adequate penicillin therapy ends communicability within 24-48 hours.

Chlamydia: Unknown; thought to be until treatment is completed.

Control: There is no reason to exclude a child with a sexually transmitted disease.

Other Information: Any person suspecting child abuse or neglect, including sexual or physical abuse must report it to the Child Abuse Hotline. In the Salt Lake area call 487-9811. For areas outside of Utah, call toll-free at 1 (800) 678-9399. A confidential investigation will be conducted to ensure that the child is not endangered. Information must be handled in strictest confidence in order to safeguard the privacy of the individual.

***Report this illness to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**

STREP THROAT AND SCARLET FEVER

Incubation Period: 1-3 days, rarely longer.

Signs and Symptoms:

Strep Throat: Fever, sore and red throat, pus spots on the back of the throat, and tender and swollen lymph nodes in the neck.

Scarlet Fever: Includes all symptoms that occur with strep throat, as well as “strawberry tongue” (a peculiar red, papillated tongue) and rash on the skin and inside the mouth. High fever, nausea and vomiting may occur. The rash on the skin is normally easily felt but not seen. The tongue is usually white before the appearance of the strawberry tongue.

Methods of Transmission: Direct or intimate contact with an infected person or asymptomatic carrier and occasionally by contaminated objects or hands. Outbreaks of strep throat may follow ingestion of contaminated foods, such as milk, egg salad or deviled eggs.

Minimum Control Measures: Communicable Period: With antibiotic treatment, communicability is eliminated within 24 hours and varies with untreated cases. Can spread through mild, unrecognized cases.

Control: EXCLUDE from attendance until 24 hours after antibiotic treatment is started. Persons with symptoms who have had contact with the diagnosed individual should seek medical attention.

Other Information: Medical attention is essential. Untreated children may develop severe complications, including rheumatic fever and glomerulonephritis (kidney disease).

Consult the local health department for help in controlling outbreaks of this disease. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.

TETANUS

Incubation Period: Varies from 3 days to 3 weeks, usually 8 days.

Signs and Symptoms: Generalized tetanus is the most common type (about 80%) of reported tetanus. The first sign is lockjaw, followed by stiffness of the neck, difficulty in swallowing and rigidity of abdominal muscles. Other symptoms include fever, sweating, elevated blood pressure and rapid heart rate. Spasms may occur frequently and last for several minutes. Complete recovery may take months.

Methods of Transmission: Tetanus is caused by infection with the bacteria *Clostridium tetani*. These bacteria are common in the soil but are quickly killed by oxygen. Any wound or cut contaminated with the soil and not open to the air (such as a puncture wound) will provide a suitable environment for the bacteria. Tetanus is usually acquired when a person who has not been immunized acquires such a wound by stepping on a dirty nail or tool contaminated with the bacteria. Then the bacteria enter the wound and produce a toxin that may spread through the blood. This toxin can cause severe muscle spasms, paralysis, and death.

Minimum Control Measures: Anyone who has an open wound injury should determine the date of his or her last tetanus booster. A person, who has not had a booster within the past 10 years, should receive a booster dose of vaccine and/or other medications to prevent tetanus disease. For some wounds, a person may need a booster if more than 5 years has elapsed since the last dose. Because tetanus is not spread person-to-person, tetanus in one child or provider will not spread to others.

Other Information: Tetanus, also called lockjaw, is an acute, often fatal disease. Tetanus is very rare in the United States due to the very high immunization rates of persons living here. Tetanus is difficult to treat, but is completely preventable through vaccination. Children receive tetanus vaccine in combination with the pertussis and diphtheria vaccine. After childhood, teens and adults need a booster injection every 10 years to make sure they are protected.

***If a provider has reason to believe a child or adult may be infected with tetanus, they should contact the local health department IMMEDIATELY.**

TUBERCULOSIS (TB)

Incubation Period: For the acute phase of the disease, the incubation period is 1 to 2 weeks. The chronic manifestations do not appear for years to decades.

Signs and Symptoms: Persons with *inactive* TB will show no symptoms of the disease. Persons with *active* TB may have a persistent cough that will not go away. They may also cough up blood, have a fever lasting longer than 2 weeks, experience night sweats, feel very tired, or lose a noticeable amount of weight. The TB skin test cannot show active TB -- active TB must be diagnosed by a physician and confirmed through a chest x-ray. **The law states that doctors must report active TB to the local health department.**

Methods of Transmission: TB is a disease primarily caused by bacteria called *Mycobacterium tuberculosis*. This germ can be spread from one person to another through the air when a person with TB disease coughs, sneezes, yells, or sings. TB is not spread by objects such as clothes, toys, dishes, walls, floors, and furniture. There are two stages of TB: (1) *inactive* TB infection is just having the TB bacteria without being sick, and (2) *active* TB or TB disease characterized by having the bacteria with the symptoms of the disease.

Other Information: *Inactive* TB infection is diagnosed by the TB skin test. This safe, simple test is given at most local health departments. A TB-infected person who has not yet developed active TB can take 6 to 12 months of medicine to eliminate the bacteria and to prevent active TB from developing. This preventive treatment is most important for TB-infected children younger than 5 years old, persons infected with the TB germ within the past 2 years, and TB-infected persons who have a weak immune system (especially HIV infection or AIDS) because they are more likely to get active TB infection.

Active TB is preventable and curable. Active TB can attack any part of the body, but it usually affects the lungs. Persons with active TB spread bacteria through the air by coughing, sneezing, or yelling.

In child care settings, TB has been spread from adults to children, although the spread of TB in such settings is rare. In family home child care settings, TB infection has been passed from sick adults living in the home to children, even though the sick adults may not have been taking care of the children directly. Well children should not be kept out of child care if they only have a positive skin test result.

Persons who are beginning work as a child care provider should have a TB skin test to check for infection with TB bacteria.

***Report this illness to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**

THRUSH **(candidiasis, yeast infection, moniliasis)**

Incubation Period: Variable, but usually between 2-5 days in infants.

Signs and Symptoms: Infection of the skin, mouth, or tongue that appears as white spots that cannot be scraped off without causing bleeding. May also occur in folds of the skin in diapered areas and is a common cause of diaper rash. This rash appears bright red and may have areas of white drainage.

Methods of Transmission: Direct contact with secretions or excretions of mouth, skin, vagina and feces from an individual or from a mother to her baby during birth. The fungus is often part of normal body flora that sometimes becomes a symptomatic infection, especially if the child has been previously treated with antibiotics.

Minimum Control Measures: Communicable Period: Presumably for as long as lesions are present.

Control: It is not necessary to exclude the child from attendance. Meticulous handwashing and disinfecting of contaminated articles (such as nipples, pacifiers, etc.) is necessary to prevent spread. Medication is usually needed to shorten duration of infection.

Other Information: Wet diapers facilitate the spread of candidiasis; keeping children in dry diapers is very important to prevent the disease. Children should be thoroughly cleaned and dried before fresh diapers are applied. Persons who have been on extended antibiotic therapy or who have a compromised immune system may be at increased risk.

VIRAL MENINGITIS* **(aseptic meningitis)**

Incubation Period: 2-21 days, depending on causative agent.

Signs and Symptoms: Acute disease with sudden onset of fever, intense headache, nausea, vomiting, and stiff neck. Behavioral changes may occur, including irritability or sluggishness. A rash may or may not be present.

Methods of Transmission: Varies with causative agent. Enteroviruses, a common cause of viral meningitis, are transmitted by the fecal-oral route (ingesting very tiny amounts of fecal material from an infected person through contaminated hands or objects). The disease may also spread by airborne droplets from respiratory secretions.

Minimum Control Measures: Communicable Period: Varies with specific infectious agent.

Control: A child with fever who feels unwell should be EXCLUDED from attendance. A child with viral meningitis should be under a physician's care. Since the virus may be excreted in feces for several weeks, proper handwashing is essential before handling or eating foods, after using the bathroom, assisting a child in the bathroom, or changing a diaper.

Other Information: A medical evaluation is necessary to determine whether meningitis is viral or bacterial because the symptoms are essentially the same. Viral meningitis is a less serious disease than bacterial meningitis, except in young infants who may suffer severe consequences. Medical care is necessary.

***Report this illness to your local health department. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**

WHOOPING COUGH* **(pertussis)**

Incubation Period: 7-10 days commonly, rarely exceeds 14 days.

Signs and Symptoms: Begins with cold symptoms such as a runny nose and an irritating cough that gradually worsens into severe coughing attacks (paroxysms) within 1-2 weeks. Violent spells of coughing frequently end with vomiting. Some cases can be severe, resulting in pneumonia or neurological symptoms. Can last for 1-2 months or longer. Young infants and adults often do not have a typical whoop. Mild cases are sometimes missed.

Methods of Transmission: Airborne droplet or direct contact with the respiratory secretions from an infected person.

Minimum Control Measures: Communicable Period: Highly communicable in early stage and up to 3 weeks after the onset of violent coughing. Antibiotics shorten communicable period to 5 days after treatment is started.

Control: EXCLUDE from attendance until 5 days after start of antibiotic therapy or until symptoms are no longer present.

Other Information: Pertussis is a vaccine-preventable disease. Immunizations should begin at 2 months of age and be received again at 4 months, 6 months, 15 months and 4-6 years. Children attending schools and early childhood programs/facilities are required by law to be adequately immunized for their age. Serious complications of pertussis include bronchopneumonia and occasionally neurological symptoms. Accelerated schedule for booster vaccines and antibiotic therapy may be recommended for exposed individuals.

***Report this illness to your local health department immediately by telephone. Also, report any pattern of illness that is unusual or an increased number of illnesses/cases.**